MAYO CLINIC LABORATORIES

1-800-533-1710

LPLFX

Reflex Testing of MYD88 and CXCR4

Patient ID	Patient Name		Birth Date	Gender	Age
SA00105300	TESTINGRNV, LPLFXMOLHEME		1984-09-11	M	33
Order Number	**Client Order Number**	**Ordering Physician**	**Report Notes**		
SA00105300	SA00105300	CLIENT, CLIENT			
Account Information		**Collected**			
C7028846 DLMP Rochester		15 Mar 2018 00:00			

Reflex Testing of MYD88 and CXCR4

Specimen Type

MCR

Bone marrow

LPLFX Reflex Result

MCR

see interpretation

Final Diagnosis

[1] MCR

Bone marrow, MYD88 L265P Mutation Analysis, Allele-specific PCR :

Negative for MYD88 L265P alteration.

Comment. The MYD88 L265P abnormality is highly associated (>90%) with the pathogenic diagnosis of lymphoplasmacytic lymphoma and the clinical syndrome of Waldenstrom macroglobulinemia (LPL/WM), particularly in the setting of an elevated IgM serum monoclonal paraprotein. The MYD88 L265P mutation is also identified in some diffuse large B-cell lymphomas (DLBL), with a higher prevalence observed in "immune privileged" sites (e.g. central nervous system, testis, breast, skin). A negative molecular result makes the specific diagnosis of LPL/WM less likely; however, these results do not necessarily exclude the possibility of lymphoma in this specimen. Clinical, laboratory and pathologic correlation is required for final diagnosis and interpretation of these results. The analytical sensitivity of this assay is approximately 1% mutation detection in a wild type background.

Further testing of CXCR4 is not performed per testing algorithm. If testing of CXCR4 is desired, please call Mayo Medical Laboratories (855–516–8404) to add the test CXLPL within a month from the sample receive date.

Method Comment: DNA was extracted from the specimen and subjected to allele-specific polymerase chain reaction (PCR) using an allele specific forward primer that distinguishes the presence of the MYD88 L265P mutation. The reaction also contains a wild-type forward 5' of the mutation site and a single reverse primer. Expected fragment lengths of PCR products are interpreted using capillary electrophoresis.

Signing Pathologist: BENJAMIN BAILEY

Received: 16 Mar 2018 15:04 **Reported:** 16 Mar 2018 16:11

Laboratory Notes

[1] This test was developed and its performance characteristics determined by Mayo Clinic in a manner consistent with CLIA requirements. This test has not been cleared or approved by the U.S. Food and Drug Administration.

Performing Site Legend

Code	Laboratory	Address	Lab Director	CLIA Certificate
MCR	Mayo Clinic Laboratories - Rochester Main Campus	200 First Street SW, Rochester, MN 55905	William G. Morice M.D. Ph.D	24D0404292